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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,976	02/15/2002	Xiangxin Bi	2950.18US02	1411
7590	04/26/2004			EXAMINER LE, HOA T
Patterson, Thuente, Skaar & Christensen, P.A. 4800 IDS Center 80 South 8th Street Minneapolis, MN 55402-2100			ART UNIT 1773	PAPER NUMBER

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/076,976	BI ET AL <i>eb</i>
	<b>Examiner</b>	<b>Art Unit</b>
	H. T. Le	1773

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 12 March 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a)  The period for reply expires \_\_\_\_ months from the mailing date of the final rejection.
- b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2.  The proposed amendment(s) will not be entered because:
  - (a)  they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b)  they raise the issue of new matter (see Note below);
  - (c)  they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See attached "Detailed Action".

3.  Applicant's reply has overcome the following rejection(s): 112-first paragraph.
4.  Newly proposed or amended claim(s) \_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: See "Detailed Action".
6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: None.

Claim(s) objected to: None.

Claim(s) rejected: 18-30.

Claim(s) withdrawn from consideration: \_\_\_\_.

8.  The drawing correction filed on \_\_\_\_ is a)a) approved or b) disapproved by the Examiner.

9.  Note the attached Information Disclosure Statement(s)( PTO-1449) Paper No(s). \_\_\_\_.

10.  Other: \_\_\_\_

  
H. T. Le  
Primary Examiner  
Art Unit: 1773

## DETAILED ACTION

### *Response to Amendment*

1. Claim 18 as presently amended includes the limitation “weakly agglomerated” and thus raises two new issues. First, there is no support in the originally filed specification for the limitation “weakly agglomerated”. Thus, the amendment to claim 18 raises 112-first paragraph (new matter) issue. Second, the term “weakly” is relative and neither the originally filed specification nor original claims provides basis so that the metes and bounds that constitute the term “weakly agglomerated” can be ascertained. Thus, the amendment to claim 18 raises 112-second paragraph (indefiniteness) issue. Accordingly, the amendment filed March 12, 2003 has not been entered.

### *Response to Arguments*

2. Upon reconsideration, the first paragraph rejections set forth in the previous office actions are hereby withdrawn. Because the withdrawal of this rejection, it is accepted that claims 18-21, 23-28 and 30 are supported by the originally filed specification and as a result they now are available to be rejected under the anticipation rejection for the same reasons applied to the rejection of claims 22 and 29. The reason why claims 18-21, 23-28 and 30 were not rejected under the art rejection in the previous office actions because they had been held as not supported by the originally filed specification. Therefore, for reason of consistency, the Examiner could not reject them as if they were part of the original disclosure.

3. Accordingly, claims 18-30 are now rejected under 35 U.S.C. 102(b) as being anticipated by Wiederhoft as applied to the rejection of claims 22 and 29 set forth in previous office actions. Note that this is not a new ground of rejection as the rejection is based on the same ground as set forth in previous office actions.

4. With regard to the prior-art rejection, Applicants argued that “the Wiederhoft patent does not teach how to form different forms of titanium dioxide. Specially, ... the Wiederhoft patent does not teach how to select between amorphous, anatase and rutile forms of titanium dioxide.” Selection of different forms of titanium dioxide is not relevant because the instant claims employ the language “comprising” which is an open language that permits non-specified ingredients even in major amount. The instant claims as recited do not exclude non-specified forms (such as anatase or amorphous) of titanium dioxide. In this case, the Wiederhoft reference teaches titanium dioxide particles which include “rutile titanium dioxide” (see col. 1 lines 8-11 and col. 2, lines 52-54), and thus it satisfies the claim language “comprising rutile titanium dioxide particles”.

5. Applicants further asserted that the Wiederhoft patent “does not seem to claim rutile titanium dioxide, so enablement was not evaluated with respect to this feature for the Wiederhoft patent. The Examiner has not indicated how to fill the void in the disclosure of the Wiederhoft patent.” By making this assertion, Applicants clearly ignore Wiederhoft’s statement that “[f]or the purposes of the present invention, nanodisperse titanium dioxide is taken to be **rutiles**, anastase and amorphous titanium dioxide... ” (col. 1, lines 8-10, *emphasis*

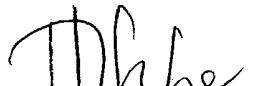
*added*). If that statement does not describe “a collection of particles comprising rutile titanium dioxide particles”, what do Applicants think it says?

6. With regard to other issues, the arguments are deemed moot as the present amendment has not been entered for reasons set forth in section 1 above.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 10:00 a.m. to 6:30 p.m., Mondays to Friday.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



H. T. Le  
Primary Examiner  
Art Unit 1773